

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

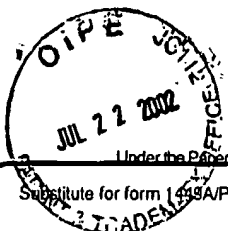
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## **IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 4

### Complete if Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Art Unit	2173
Examiner Name	Unassigned X. L. Bautista
Attorney Docket Number	015358-007300US

### U.S. PATENT DOCUMENTS

Examiner	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
XLB	1	6,182,090	01-30-2001	Peairs	
XLB	2	6,101,503	08-08-2000	Cooper et al.	
XLB	3	6,055,542	04-25-2000	Nielsen et al.	
XLB	4	6,028,601	02-22-2000	Machiraju et al.	
XLB	5	6,026,409	02-15-2000	Blumenthal	
XLB	6	6,021,403	02-01-2000	Horvitz et al.	
XLB	7	6,006,218	12-21-1999	Breese et al.	
XLB	8	5,987,454	11-16-1999	Hobbs	
XLB	9	5,950,187	09-07-1999	Tsuda	
XLB	10	5,946,678	08-31-1999	Aalbersberg	
XLB	11	5,943,679	08-24-1999	Niles et al.	
XLB	12	5,873,107	02-16-1999	Borovoy et al.	
XLB	13	5,870,770	02-09-1999	Wolfe	
XLB	14	5,860,074	01-12-1999	Rowe et al.	
XLB	15	5,857,185	01-05-1999	Yamamura	
XLB	16	5,838,317	11-17-1998	Bolnick et al.	
XLB	17	5,832,474	11-03-1998	Lopresti et al.	
XLB	18	5,819,301	10-06-1998	Rowe et al.	
XLB	19	5,784,616	07-21-1998	Horvitz	
XLB	20	5,781,785	07-14-1998	Rowe et al.	
XLB	21	5,778,397	07-07-1998	Kupiec et al.	
XLB	22	5,761,655	06-02-1998	Hoffman	
XLB	23	5,748,805	05-05-1998	Withgott et al.	
XLB	24	5,737,599	04-07-1998	Rowe et al.	
XLB	25	5,694,559	12-02-1997	Hobson et al.	
XLB	26	5,680,636	10-21-1997	Levine et al.	
XLB	27	5,638,543	06-10-1997	Pedersen et al.	
XLB	28	5,596,700	01-21-1997	Darnell et al.	
XLB	29	5,481,666	01-02-1996	Nguyen et al.	
XLB	30	5,479,600	12-26-1995	Wroblewski et al.	
XLB	31	5,442,795	08-15-1995	Levine et al.	
XLB	32	5,418,948	05-23-1995	Turtle	
XLB	33	5,404,295	04-04-1995	Katz et al.	
XLB	34	5,384,703	01-24-1995	Withgott et al.	

RECEIVED

JUL 24 2002

Technology Center 2100

Examiner  
Signature

X. L. Bautista

Date  
Considered

6/7/04

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached Kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

PA 3233604 v1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

## Complete if Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

Sheet 2 of 4

## U.S. PATENT DOCUMENTS

Examiner	Cite No. <sup>1</sup>	Document Number Number Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
XLB	35	5,349,658	09-20-1994	O'Rourke et al.	<p><b>RECEIVED</b></p> <p>JUL 24 2002</p> <p>Technology Center 2100</p>
XLB	36	5,309,359	05-03-1994	Katz et al.	
XLB	37	5,153,831	10-06-1992	Yianilos	
XLB	38	4,823,303	04-18-1989	Terasawa	
XLB	39	4,417,239	11-22-1983	Demke et al.	

## FOREIGN PATENT DOCUMENTS

Examiner Initials <sup>5</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>4</sup> (if known)				
XLB	40	EP	802 492	A1	10-22-1997	IBM Corporation		
XLB	41	EP	762 297	A2	03-12-1997	Sun Microsystems		
XLB	42	EP	737 927	A2	10-16-1996	Xerox Corporation		
XLB	43	EP	378 848	A2	07-05-1990	IBM Corporation		
XLB	44	EP	459 174	B1	11-20-1996	Cina		
XLB	45	GB	2 290 898	A	01-10-1996	Canon Business Machines, Inc.		
XLB	46	GB	2 234 609	A	02-06-1991	IBM Corporation		
XLB	47	GB	2 156 118	A	10-02-1985	Canon Kabushiki Kaisha		
XLB	48	GB	2 137 768	A	10-10-1984	Gavilan Computer Corporation		
XLB	49	JP	8-297677	A	11-12-1996	Xerox Corporation		
XLB								

Examiner Signature	X. L. Bautista	Date Considered	6/7/04
-----------------------	----------------	--------------------	--------

<sup>1</sup> EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached Kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231  
PA 3233604 v1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 4

## Complete if Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
XLB	50	Acrobat Reader Version 2.0 (software application), Adobe Systems Incorporated, screenshots Figures 1-10 (1994).	
XLB	51	Adobe Acrobat Reader 3.0 screen dumps (fig. 1-3), (1996).	
XLB	52	Adobe Systems, Inc., "Adobe Photoshop 4.0 User Guide for Macintosh and Windows," pp. 30-31 (1996).	
XLB	53	Apple Macintosh system 7 reference manual, pages 30-31 (1991).	
XLB	54	BALL et al. "Software Visualization in the Large", IEEE Computer, 29: 33-43 (1996).	
XLB	55	BOGURAEV et al. "Saliency-Based Content Characterisation of Text Documents," <u>Proceedings of the ACL/EACL Workshop on Intellegent (sic) Scalable Text Summarization</u> , 1997. Topic identification, Discourse-based summarization. pp. 1-12 (1997).	
XLB	56	BRANDOW et al. "Automatic Condensation of Electronic Publications by Sentence Selection," <u>Information Processing and Management</u> , 31(5):675-685 (1995).	
XLB	57	GLIEDMAN "Virtual Office Managers," Computer Shopper, 18:290 (1998).	
XLB	58	GREENBERG et al., "Sharing fisheye views in relaxed-WYSIWIS groupware applications," <u>Proceedings of Graphics Interface</u> , Toronto, Canada, May 22-24, 1995, Distributed by Morgan-Kaufmann, Pp. 28-38, <a href="http://www.cpsc.ucalgary.ca/group/lab/papers/1996/96-Fisheye.GI/gi96_fisheye.html">http://www.cpsc.ucalgary.ca/group/lab/papers/1996/96-Fisheye.GI/gi96_fisheye.html</a> .	
XLB	59	HEARST et al. "TileBars: Visualization of Term Distribution Information in Full Text Information Access," <u>Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI)</u> , Denver, CO., May 1995, Pp. 1-8, <a href="http://www.acm.org/sigchi/chi95/Electronic/documents/papers/mah_bdy.htm">http://www.acm.org/sigchi/chi95/Electronic/documents/papers/mah_bdy.htm</a> .	
XLB	60	HILL et al. "Edit Wear and Read Wear", ACM, pp. 3-9 (May 3-7, 1992).	
XLB	61	LANGLEY "An Analysis of Bayesian Classifiers," <u>Proceedings of the Tenth National Conference on Artificial Intelligence</u> , pp. 223-228, 1992.	
XLB	62	LANGLEY "Induction of Selective Bayesian Classifiers," <u>Proceedings of the Tenth National Conference on Uncertainty in Artificial Intelligence</u> , pp. 400-406, (1994).	
XLB	63	MANBER "The Use of Customized Emphasis in Text Visualization," <u>Proceedings of 1997 IEEE Conf. on Information Visualization</u> , pages 132-138, (1997).	
XLB	64	SCHWEIGHOFER et al. "The Automatic Generation of Hypertext Links in Legal Documents," <u>Lecture Notes in Computer Science</u> , vol. 1134, Wagner et al., eds., from 7th Int. Conf., DEXA 96', held 9/96 in Zurich, Switzerland (1996)	

Examiner  
Signature

X. L. Bautista

Date  
Considered

6/7/04

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
PA 3233604 v1

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

### Complete if Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
XLB	65	SUMITA et al. "Document Structure Extraction for Interactive Document Retrieval Systems," <u>Proceedings of SIGDOC 93</u> , pages 301-310, (1993).	
XLB	66	TAGHVA et al. "An Evolution of an Automatic Markup System," <u>SPIE</u> , 2422:317-327 (1995).	
XLB	67	TAXT "Segmentation of Document Images," <u>IEEE</u> 11:1322-1329 (1989).	

RECEIVED

JUL 24 2002

Technology Center 2100

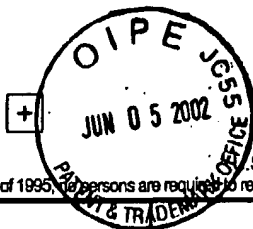
Examiner Signature	X. L. Bautista	Date Considered	6/7/04
-----------------------	----------------	--------------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
PA 3233604 v1

Please type a plus sign (+) inside this box →



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 5

Complete If Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Group Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

RECEIVED  
JUN 07 2002  
Technology Center 2100

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
XLB	1.	Adobe Premiere (video editing software) from <a href="http://www.adobe.com">Http://www.adobe.com</a> (2002).	
XLB	2.	BOBICK et al. "A State Based Approach to the Representation and Recognition of Gesture," IEEE Trans. on Pattern Analysis and Machine Intelligence, pp. 1325-1337 (1997).	
XLB	3.	BORECZKY, J. et al. "An Interactive Comic Book Presentation for Exploring Video," Conference on Human factors in Computing Systems (CHI 2000), ACM Press, pp. 185-192, 2000.	
XLB	4.	BOYKIN et al, "Improving Broadcast News Segmentation Processing," IEEE Multimedia '99 (1999).	
XLB	5.	BOYKIN et al. " Machine learning of Event Segmentation for News on Demand," Communications of the ACM, 43:35-41(2000).	
XLB	6.	BROWN et al. "Automatic Content-Based Retrieval of Broadcast News," ACM Multimedia 5, San Francisco, CA (1995).	
XLB	7.	CAJ et al. "Integrated Multimedia Publishing - Combining TV and Newspaper Content on Personal Channels," WWW8 Conference, 1999.	
XLB	8.	CHEN et al. "Emotion Recognition from Audiovisual Information," Proc. IEEE Workshop on Multimedia Signal Processing, Los Angeles, CA, USA, pp. 83-88 (1998).	
XLB	9.	CHEN et al. "ViBE: A Video Indexing and Browsing Environment," Proceedings of the SPIE Conference on Multimedia Storage and Archiving Systems September 20-22, 1999, Boston 3848:148-164 (1999).	
XLB	10.	CHIU et al. "NoteLook: Taking Notes in Meetings with Digital Video and Ink," ACM Multimedia 99 Orlando, (1999).	
XLB	11.	CHIU et al. "Automatically linking multimedia meeting documents by image matching," Proceedings of Hypertext '00. ACM, New York, pp. 244-245 (2000).	
XLB	12.	CHRISTEL et al. "Evolving Video Skims into Useful Multimedia Abstractions," Proceedings of the CHI '98 Conference on Human Factors in Computing Systems (Los Angeles, CA, April 1998), pp. 171 -178 (1998).	
XLB	13.	CHRISTEL et al. "Information Visualization within a Digital Video Library," Journal of Intelligent Information Systems 11:35-257 (1998).	
XLB	14.	DELLAERT et al. "Recognizing emotion in speech," Proceedings ICSLP 96. Fourth International Conference on Spoken Language Processing New York (Cat. No. 96TH8206). IEEE. Vol:1970-1973 (1996).	
XLB	15.	DIMITROVA et al. "Video Keyframe Extraction and Filtering: A Keyframe is not a Keyframe to Everyone," CIKM 1997:113-120 (1997).	

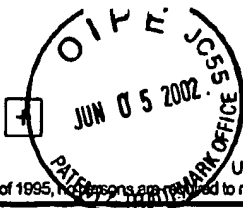
Examiner Signature	X. L. Bautista	Date Considered	6/7/04
--------------------	----------------	-----------------	--------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
PA 3222925 v1

Please type a plus sign (+) inside this box →



PTO/SB/088 (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 5

Complete If Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Group Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

RECEIVED  
JUN 07 2002  
Technology Center 2100

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
XLB	16.	DOERMANN et al. "Applying Algebraic and differential invariants for logo recognition," Machine Vision and Applications 9:73-86 (1996).	
XLB	17.	DONATO et al. "Classifying Facial Actions", IEEE Trans. on Pattern Analysis and Machine Intelligence, 21:974-989 (1999).	
XLB	18.	ESSA et al. "Coding Analysis Interpretation and Recognition of Facial Expressions, IEEE Trans. on Pattern Analysis and Machine Intelligence, 19:757-763 (1997).	
XLB	19.	Face recognition techniques described at web site <a href="http://www.visionics.com">http://www.visionics.com</a> (2002).	
XLB	20.	FOOTE, Jonathan, et al. "An Intelligent Media Browser using Automatic Multimodal Analysis," ACM Multimedia 8, Bristol, UK (1998).	
XLB	21.	FURUI et al. "Japanese Broadcast News Transcription and Information Extraction," Communications of the ACM, 43(2):71-73, Feb 2000.	
XLB	22.	GAUVAIN et al. "Transcribing Broadcast News for Audio and Video Indexing," Communications of the ACM, 43:64-70 (2000).	
XLB	23.	GIBBON "Generating Hypermedia Documents from Transcriptions of Television Programs Using Parallel Text Alignment," Handbook of Internet and Multimedia Systems and Applications, David C. Gibbon; CRC Press, (1998).	
XLB	24.	GORDON "Using annotated video as an information retrieval interface," ACM Proceedings of the 5th International Conference on Intelligent User Interfaces New Orleans pp. 133 - 140 (2000)	
XLB	25.	HAUPTMANN et al. "Text, speech and vision for video segmentation: the informedia project," Proc. AAAI Fall Symp. Computational Models for Integrating Language and Vision, Boston, MA, Nov. 10-12, 1995.	
XLB	26.	HAUPTMANN et al. "Story Segmentation and Detection of Commercials in Broadcast News Video," Advances in Digital Libraries Conference, Santa Barbara, CA, April 22-23 1998.	
XLB	27.	HE et al. "Comparing Presentation Summaries: Slides vs. Reading vs. Listening," Conference on Human factors in Computing Systems (CHI 2000), April 1-6, 2000.	
XLB	28.	HECHT "Embedded data glyph Technology for Hardcopy Digital Documents," Proc. SPIE 2171:341-352 (1994).	

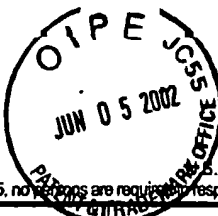
Examiner Signature	X. L. Bautista	Date Considered	6/7/02
--------------------	----------------	-----------------	--------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
PA 3222925 v1

Please type a plus sign (+) inside this box → ☐



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 5

## **Complete If Known**

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Group Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

RECEIVED  
JUN 07 2002  
Technology Center 2100

XLB	29.	HECHT "Printed Embedded Data Graphical User Interfaces," IEEE Computer, March 2001.	
XLB	30.	HU et al. "Multimedia Description Framework (MDF) for content descriptions of Audio/Video Documents," Fourth ACM Conference on Digital Libraries (DL '99) August 11-14, 1999.	
XLB	31.	IOFFE et al. "Finding people by sampling," Proc. International Conference on Computer Vision, pp. 1082-1087 (1999).	
XLB	32.	JIN et al. "Topic Tracking for Radio, TV Broadcast, and Newswire," Proceedings of the DARPA Broadcast News Workshop, Feb. 28-Mar 3, 1999, Herndon, VA.	
XLB	33.	KOMLODI et al. "Key Frame Preview Techniques for Video Browsing," (Proceedings of the 3rd ACM International Conference on Digital Libraries, June 23-26, 1998, Pittsburgh, pp. 118-125 (1998).	
XLB	34.	LI et al. "Automatic Text Detection and Tracking in Digital Video," IEEE Transactions on Image Processing - Special Issue on Image and Video Processing for Digital Libraries, 9:147-156 (2000).	
XLB	35.	LI et al. "Text Extraction and Recognition in Digital Video," Proceedings of Third IAPR Workshop on Document Analysis Systems, pp. 118-128, 1998.	
XLB	36.	LI et al. "VISION: a digital video library," Proceedings of the 1st ACM International Conference on Digital Libraries, pp. 19-27, 1996.	
XLB	37.	LIANG et al. "Practical video indexing and retrieval system SPIE 3240:294-303, (1988).	
XLB	38.	LIENHART et al. "On the Detection and Recognition of Television Commercials," Proc. IEEE Conf. on Multimedia Computing and Systems, Ottawa, Canada, pp. 509-516, June 1997.	
XLB	39.	MA et al. "An Indexing and Browsing System For Home Video," Invited paper, EUSIPCO '2000, 10th European Signal Processing Conference, 5-8, Sept. 2000, Tampere, Finland.	
XLB	40.	MAYBURY "News on Demand," Communications of the ACM, 43:33-34 (2000).	
XLB	41.	MAYBURY et al. "Segmentation, Content Extraction and Visualization of Broadcast News Video Using Multistream Analysis," AAAI Paper (1997).	
XLB	42.	MAYBURY et al. "Multimedia Summaries of Broadcast News," International Conference on Intelligent Information Systems pp. 447-449 (1997).	
XLB	43.	MAYBURY et al. "Multimedia Summaries of Broadcast News," International Conference on Intelligent Information Systems, December 8-10, 1997.	
XLB	44.	MERIALDO et al. "Automatic Construction of Personalized TV News Programs," Seventh ACM International Multimedia Conference, Orlando November 1999.	
XLB	45.	MERLINO et al. "Broadcast News Navigation using Story Segmentation," Advanced Information Systems Center, The MITRE Corporation (1997).	

Examiner  
Signature

X. L. Baptista

Date  
Considered

6/7/04

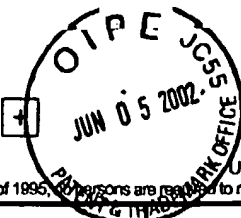
\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
PA 3222925 v1



Please type a plus sign (+) inside this box →



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 5

### Complete If Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Group Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

RECEIVED  
JUN 07 2002  
Technology Center 2100

XLB	46.	MERLINO et al. "Broadcast News Processing Techniques," MITRE Technical Report, MTR 99B0000031, April 1999.
XLB	47.	MOHAN "Text-based search of TV news stories," Proc. SPIE 2918:2-13 (1996).
XLB	48.	MYERS et al. "Multi-View Intelligent Editor for Digital Video Libraries," First ACM and IEEE Joint Conference on Digital Libraries, June 24-28, 2001, Roanoke, VA, pp. 108-115.
XLB	49.	OH et al. "Efficient and Cost-effective Techniques for Browsing and Indexing Large Video Databases," SIGMOD Conference 2000: 415-428
XLB	50.	PHOTINA et al. "Improving acoustic models with captioned multimedia speech," Proceedings IEEE International Conference on Multimedia Computing and Systems, 2:767-71 (1999).
XLB	51.	ROWLEY et al. "Neural network-based face detection," IEEE Transactions on Pattern Analysis and Machine Intelligence, 20:23-38 (1998).
XLB	52.	SHAHRARAY et al. "Automated Authoring of Hypermedia Documents of Video Programs," ACM Multimedia 95, November 5-9, 1995, San Francisco, CA (1995).
XLB	53.	SHAHRARAY et al. "Automatic generation of pictorial transcripts of video programs," Proceedings of the SPIE- Int. Soc. Opt. Eng. 2417:512-518 (1985).
XLB	54.	SHAHRARAY et al. "Pictorial transcripts: multimedia processing applied to digital library creation," 1997 IEEE First Workshop on Multimedia Signal Processing pp. 581-586 (1997).
XLB	55.	SMITH et al. "Video Skimming and Characterization through the Combination of Image and Language Understanding," Computer Vision and Pattern Recognition IEEE 1997.
XLB	56.	SONMEZ et al. "Multiple speaker tracking and detection: handset normalization and duration scoring," Digital Signal Processing 10:133-143 (2000).
XLB	57.	SUDA et al. "Logo and word matching using a general approach to signal registration," Fourth International Conference on Document Analysis and Recognition, Ulm, Germany, August 18-20, 1997, pp. 61-65.
XLB	58.	TENNENHOUSE et al. "A software-oriented approach to the design of media processing environments," Proceedings of the IEEE International Conference on Multimedia Computing and Systems, pp. 435-444 (1994).
XLB	59.	TONOMURA et al. "VideoMAP and VideoSpacecon : tools for anatomizing video content," Proc. INTERCHI '93 ACM pp 131-138 (1993).
XLB	60.	UCHIHASHI et al. "Summarizing Video Using a Shot Importance Measure and a Frame-Packing Algorithm," Proceedings of the International Conference on Acoustics, Speech, and Signal Processing (Phoenix, AZ) 6:3041-3044 (1999).
XLB	61.	UCHIHASHI et al. "Video Manga: Generating Semantically Meaningful Video Summaries," ACM Multimedia 99, Orlando, Florida, October 30-November 5, 1999.
XLB	62.	Video content management and publishing software from Virage <a href="http://www.virage.com">http://www.virage.com</a> (2002).

Examiner  
Signature

X. L. Batista

Date  
Considered

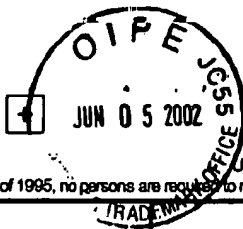
6/7/04

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
PA 3222925 v1

Please type a plus sign (+) inside this box →



PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 5 of 5

Complete If Known

Application Number	10/001,849
Filing Date	November 19, 2001
First Named Inventor	Jonathan J. Hull
Group Art Unit	2173
Examiner Name	Unassigned
Attorney Docket Number	015358-007300US

RECEIVED  
JUN 07 2002  
Technology Center 2100

XLB	63.	"Video Mail Retrieval Using Voice" Cambridge University Engineering Department Computer Laboratory and Olivetti Research Laboratory summary of research found at <a href="http://svr-www.eng.cam.ac.uk/research/projects/vmri/">http://svr-www.eng.cam.ac.uk/research/projects/vmri/</a> (1997).	
XLB	64.	WACTLAR et al. "Complementary Video and Audio Analysis for Broadcast News Archives," Communications of the ACM, 43:42-47 (2000).	
XLB	65.	WACTLER et al. "Intelligent access to digital video: Informedia project," Computer 29:48-52 (1996).	
XLB	66.	WEISS et al. "Composition and Search with a Video Algebra," IEEE Multimedia 2:12-25 (1995).	
XLB	67.	WITTENBURG et al. "Browsing with Dynamic Key Frame Collages in Web-Based Entertainment Video Services," In Proceedings of IEEE International Conference on Multimedia Computing and Systems, June 7-11, 1999, Florence, Italy 2:913-918 (1999).	
XLB	68.	ZHANG et al. "Detection of text Captions in Compressed domain Video," International Multimedia Conference Proceedings of the 2000 ACM workshops on Multimedia 2000, Los Angeles, California, United States pp. 201 - 204.	

Examiner Signature	X. L. Bautista	Date Considered	6/7/04
--------------------	----------------	-----------------	--------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

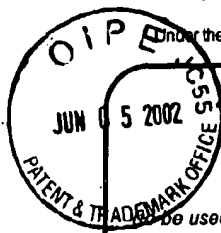
Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.  
PA 3222925 v1

Please type a plus sign (+) inside this box → ☐

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)		Application Number	10/001,849
		Filing Date	November 19, 2001
		First Named Inventor	Jonathan J. Hull
		Group Art Unit	Unassigned
		Examiner Name	2173
Total Number of Pages in This Submission		Attorney Docket Number	015358-007300US

RECEIVED  
JUN 07 2002  
Technology Center 2100

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment / Response  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application)  <input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 68 IDS references, PTO forms SB08B (4 pages), Return Postcard.
Remarks		The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm and Individual name	Townsend and Townsend and Crew LLP Sujit B. Kotwal		Reg. No. 43,336
Signature	S. B. Kotwal		
Date	May 28, 2002		

## CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: <u>May 29, 2002</u>			
Typed or printed name	Roger Hylton		
Signature			Date <u>5/29/2002</u>

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. PA 3222942 v1

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents  
Washington, D.C. 20231



PATENT #6  
Attorney Docket No.: 015358-007300US

On MAY 29, 2002

TOWNSEND and TOWNSEND and CREW LLP

By:  ROGER HYLTON

RECEIVED  
JUN 07 2002  
Technology Center 2100

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Jonathan J. Hull et al.

Application No.: 10/001,849

Filed: November 19, 2001  
For: TECHNIQUES FOR  
ANNOTATING MULTIMEDIA  
INFORMATION

Examiner: Unassigned

Art Unit: 2173

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Jonathan J. Hull et al.  
Application No.: 10/001,849  
Page 2



PATENT

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

*S. B. Kotwal*

Sujit B. Kotwal  
Reg. No. 43,336

RECEIVED  
JUN 07 2002  
Technology Center 2100

TOWNSEND and TOWNSEND and CREW LLP  
Two Embarcadero Center, 8<sup>th</sup> Floor  
San Francisco, California 94111-3834  
Tel: 650-326-2400  
Fax: 650-326-2422  
BSS:rmh

PA 3222925 v1